

deleted has a line through it. The drawings are the same for both patent applications. All of the subject matter recited in the pending claims was first disclosed in the originally filed April 9, 2001 provisional application. These original disclosures are substantially the same as the disclosures in the present application, and they are enabling under 35 U.S. C. § 112.

The Brittain et al 0011369 published application was filed on September 4, 2002, which is clearly long after Applicant's April 9, 2001 filing date. It is, however, a continuation-in-part of U.S. application No. 09/682,699 which has been published as US2002/0140423A1.

Published U.S. application 2002/0140423A1 was filed on October 5, 2001, which is also clearly after Applicants' April 9, 2001 effective filing date. It is, however, a continuation-in-part application of a prior U.S. application No. 09/681,420 which has been published as US2002/0143247A1.

Published U.S. application 2002/0143247A1 was filed on March 30, 2001 less than two weeks before Applicants April 9, 2001 effective filing date. However, this parent application does not disclose any of the subject matter claimed in the present application. As indicated at paragraph [0007] of the 2002/0143247A1 application, it is directed to "stepping" the moveable table through the scanner, not continuously moving the table as taught by the present application. In other words, this prior application teaches that the table be moved, or stepped, through a series of positions and at each position, while the table is stationary, data is acquired. No data is acquired during table motion.

All of the independent claims of the present application include a step of continuously acquiring data as the subject is moved through the FOV. As indicated in the Summary Of The Invention of both the present application and its provisional application, "the present invention is a method for acquiring an MR image from an extended field of view in which the patient table is continuously moved during the scan". The published application US2002/0143247A1 does not suggest continuous

table motion and certainly does not disclose any method for performing in such a manner.

Independent claims 1 and 18 also distinguish over this reference in another respect. Both pending claims 1 and 18 recite that the pulse sequence used to continuously acquire data employ a readout gradient that is directed along the same direction as table motion. This is not disclosed in the March 30, 2001 reference (US2002/0143247A1), but was specifically added to the later-filed October 5, 2001 reference (US2002/0140423A1). See paragraphs [0009] and [0012] in the later application under the heading Summary Of The Invention where the applicant touts "continuous table motion" rather than stepped table motion, and the acquisition of MR data is described "using frequency encoding in the direction of table motion". In other words, the benefit of acquiring data during continuous table motion with a pulse sequence having a readout gradient in the direction of table motion was first recognized by Pauly/Brittain well after April 9, 2001 and is the reason they filed this later application.

Independent claim 26 also distinguishes over all three of these Pauly/Brittain patent applications by specifically reciting a slab select gradient perpendicular to the axis of table motion. The usual practice in the art as evidenced by these three references is to orient the slice or slab select gradient in the direction of table motion. See Figs. 2 and 3 in all three U.S. applications where the slab excitation thickness and location is oriented along the axis of motion 104. Compare this with Fig. 3 in the present application where a slab 12 with a "coronal orientation" is produced with a slab select gradient oriented along a z-axis which is perpendicular to table motion along the x-axis. This orientation of the slab select gradient is particularly advantageous when imaging vasculature that extends over a limited vertical distance, since it reduces the number of vertical phase encodings for a given image resolution and speeds up the scan.

All the pending claims are believed, therefore, to recite subject matter which is patentable over the prior art and allowance of the same is requested. Applicants'

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RESPONSE TO OFFICE ACTION
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attorney welcomes a telephone interview with the Examiner to resolve any issues that may remain in this application.

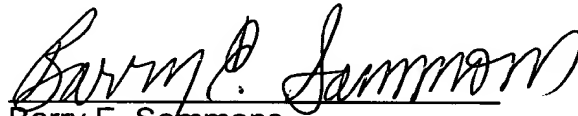
The Commissioner is authorized to charge any fees under 37 CFR § 1.17 that may be due on this application to Deposit Account 17-0055. The Commissioner is also authorized to treat this amendment and any future reply in this matter requiring a petition for an extension of time as incorporating a petition for extension of time for the appropriate length of time as provided by 37 CFR § 136(a)(3).

Respectfully submitted,

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